



# KARO ECHO Newsletter

## KARO ECHO

Serving the communities  
of El Cerrito and  
Kensington, California

**Web:** [www.karoecho.net](http://www.karoecho.net)

**Facebook:**  
[KARO ECHO facebook](#)

**Email:** [info@karoecho.net](mailto:info@karoecho.net)

## Important Frequencies

KE Primary: 146.415 MHz  
Weekly Net, Thurs. 1900

KE Secondary: 146.475 MHz

4Cs Repeater: 145.110 MHz  
(TX down 600 with PL 82.5)

## Monthly Meetings

In-person meetings

2<sup>nd</sup> Monday of each month  
7:00 pm

Arlington Park Clubhouse,  
**(new location)**  
1120 Arlington Blvd,  
El Cerrito, CA

The next meetings are:

Dec. 9<sup>th</sup>, 2019

Jan. 13<sup>th</sup>, 2019

Meeting minutes are on  
the website in the past  
events page.

## What's New

### KARO ECHO Meeting Dec. 9th, 1900 in El Cerrito

The KARO ECHO meeting start time continues to be 1900 (previously 1930). The location also continues to be the new Arlington Park Clubhouse location used for the past several months. The next meeting will be held on Monday December 13th at Arlington Park Clubhouse, 1120 Arlington Blvd, El Cerrito, CA. The training portion of this meeting will discuss various experiences during the Nov. 16th Light Up the Bay county-wide exercise.

### Light Up the Bay (LUTB) county-wide exercise, November 16th

While El Cerrito CERT and KARO ECHO were not formal participants in the Light Up the Bay exercise, several KARO ECHO members did participate and a Kensington contingent, led by Hal KK6NDF, assembled a neighborhood exercise (Ken 6 CERT) and relayed traffic to the county through a simulated EOC operated by Jerry K6KOP, as well as Marion KC6OBK, and Annette KJ6SWK. Many of the Richmond members of KARO ECHO participated in the large, multi-neighborhood drill organized by Richmond CERT. David KJ6AAT and Diane KK6RED deserve recognition for their leadership on the Richmond portion of this exercise, as well as Karen KK6ZPM, Jay KJ6WSS, Dave, KM6TCB and David KN6BVF.



KM6TCB operating at Carrol Park for Point Richmond CERT

**LOCAL NETS****KARO ECHO NET**

146.415 MHz Simplex

Thursday eve, immediately after the West Contra Costa RACES Net, but never before 1900 hours local time.

**West Contra County ACS/RACES Net**

145.110 MHz repeater

(TX down 600 with PL 82.5)

Thursday: 1845 local time

**Contra Costa County HF EmComm/RACES Net**

3893 KHz

Thursday: 1835 local time

**American Red Cross of the Bay Area (ARCBA)**

WW6BAY Repeater

443.975 MHz

TX =5 MHz, PL 100 Hz

Wednesday: 2000 local time

**BOARD OFFICERS**

President: Hal KK6NDF

Treasurer: Larry KK6GIO

Secretary: Natalie KM6UCF

Emergency Coordinator:  
(also newsletter and  
net coordinator)

Howdy KE6BEE

Webmaestro: Rob K6RJM

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**What's New *(continued)***

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**KARO ECHO Mobile Radio "Go-kit" Has a Home**

A fully featured mobile radio "go-kit" with large battery, ham and GMRS radios, antennas and accessories (including message forms and documentation) is being deployed to Davis' KJ6PPR garage. A few KARO ECHO operators should have access in case of using it mobile in emergency operations.

Contact [info@karoecho.net](mailto:info@karoecho.net) if you are interested in being one of the operators with access to this mobile kit.

**Antenna Patch Boxes for El Cerrito Clubhouses**

The two roof-top antenna patch boxes on the Harding and Tassajara clubhouses were used in the Oct 26th SET. KARO ECHO operators are encouraged to test using them. The boxes have combination lock access, contact Howdy [ke6bee@arrl.net](mailto:ke6bee@arrl.net). Patch cords that can adapt to common hand held radios are stored in the boxes, but it is also a good idea for each operator to have a stock of appropriate adapters and cables to fit this, and other, external antenna connection applications.

**Welcome New Hams**

New Kensington licenses issued: none

New El Cerrito licenses issued: KN6GDR, KN6GDS

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## Light Up the Bay, Nov. 16th, West County Critique, NI6A

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Here is an abridged version of a critique of the west county Light up the Bay exercise as observed by Don, NI6A.

**1) First, this, hearty congratulations!** Listening to multiple local FRS and wide area GMRS nets, it appeared to this observer, that they did an excellent job considering it was the first and only ever city-wide FRS/GMRS exercise coordinated with the Richmond Comm Center. Those CERT coordinators have done an excellent job and it is a good start indeed. Follows are where more practice may be warranted. If we don't acknowledge our weak spots, then they will most likely not be corrected.

**2) Efficiency, through-put, and headroom can be improved by not repeating everything twice.** I feel very strongly that we should present and maintain best operating practices so that newbies will not fall into bad and inefficient habits. Efficiency includes the best use of a limited spectrum, efficiently paced speediness, brevity, and clarity without sacrificing accuracy. Nothing is more frustrating than to wait in queue with emergency or priority traffic while NCS or other stations are wordy or repeat entire messages back needlessly as a standard operating procedure (SOP). Best practices dictate that when in doubt, use standard radio operator best practices by training in how to use fills such as, "**word after, word before, all between, all before, all after, please confirm**", etc. If the receiving station is certain that they have copied the message correctly, the simple response is to voice, "copy" or "roger", or "QSL" on CW. Repeating back the message as a SOP, slows down the entire network. No one expects newbies to be efficient operators over night; but assuming that they desire to learn best practices, we should set a good example.

**3. FCC Rule Violations:** Although the GMRS operators in West County did an excellent and conscientious job at identifying both their tactical and FCC callsigns; the ham operators did not. Monitoring the Richmond CERT ham simplex net, the Richmond ham EOC frequency, and the County wide WA6HAM repeater net, FCC callsign identifications were sorely lacking:

a) The NCS stations must identify every 10 minutes when active. This was not done in some cases for periods over 2 hours (to my knowledge).

b) Stations checking into the nets and sending traffic must use their FCC callsign at least once either at the beginning or the end of the message. Most (yes **most**) stations never identified other than using tactical callsigns. Granted using FCC callsigns can be overdone; but what this observer witnessed were gross violations of the FCC rules. This also happened on the WA6HAM repeater system. I would like to remind all who are responsible that running a test exercise does not free them from FCC rules and regulations. We should be able to provide BEST PRACTICES direction in this regard. Similarly, the words, "test message" or "this is a test" should be used at least once either before the start of the message, at the end of the message, or both.

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## Oct. 26th SET Critique *(continued)*

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**4. Missing message time/date stamps creates ambiguity.** Most messages sent in West County had neither a message time or date stamp. I can see where the date stamp may not be necessary in a 1/2 day exercise; but if this was a 7.01 Richter scale earthquake centered in San Pablo the date and time are essential. Having been in a few disasters from experience, messages too often get buried and/or temporarily lost and delayed. Obviously the most **recent** status report should supersede any previous report. The time/date should be established by the originating message and that same time/date stamp should follow the message unaltered all the way to delivery.

What I have found when the message traffic gets hot and heavy during a disaster, newer messages can entirely supersede older messages, and without time/date stamps we may add to the confusion and need to trace and verify the current situation; which would needlessly add more congestion to an already overloaded system if the time date stamp followed the original message ala form 213 protocol. KaroEcho has a modified 213 (an optional added header and footer); which indicates when the message was originated via amateur radio, but maintaining the original ICS-213 To, FROM, SUBJECT, and TIME DATE fields that are expected to be included by the originator in the field (most likely the CERT Area IC or their appointed message center manager/comm authority). In any case, a time closely connected to the situation should accompany the message. To reiterate, the time that a message is received at the City or County EOC may differ widely from the time of the event being addressed.

**5. Missing the From and To Fields:** Similarly, the from fields were often missing. Granted the City EOC may have been familiar with the originating operator and their location through their tactical ID, but simply passing on the message without a name or title/position or location will very likely create ambiguity and delay at further destinations such as County OES.

The TO field was also often missing. We can assume that all messages coming into the city EOC may be for the IC; but the IC is going to be too busy to field all incoming messages, hence the need for a message center manager to triage the messages. Skilled message center managers at CERT ICPs and EOCs are hard to come by; and it is strongly suggested that a TO field be filled out thus helping to direct the message; e.g., public works, mayor, PG&E, BART police, Red Cross, etc. Messages at CERT ICPs, City EOC, and County OES should be at least in duplicate if not in triplicate.

## Activities

### Weekly Net Control Rotation

Thanks go out to the volunteer stations who have been taking turns as Net Control Stations (NCS) each Thursday. This rotation has been working very well and everyone has been doing a great job. The regular NCS roster has 9 operators. There are opportunities for others to fill in when a regular station has a scheduling conflict and there is always room to add more stations to the rotation. [Download the new Net Script for NCS operators.](#)

**An error was detected** in previously published tables of net control assignment dates start the week of 12/12/2019. If you entered dates on your calendar from older information please check against this revised table and the updated Karo ECHO Google calendar. Below are the current scheduled dates for each operator. The [KARO ECHO google calendar](#) also has these assignments and can be found at the bottom of the events page. Add to your electronic calendar By pressing the "+GoogleCalendar" button in the lower right.

Callsign	Name	Assigned Dates (skipped: 7/4/2019, 11/28/2019)						
KE6BEE	Howdy Goudey	6/20/2019	8/29/2019	10/31/2019	1/9/2020	3/12/2020	5/14/2020	7/16/2020
KK6NDF	Hal Graboske	6/27/2019	9/5/2019	11/7/2019	1/16/2020	3/19/2020	5/21/2020	7/23/2020
KM6HBO	Jamuel Starkey	7/11/2019	9/12/2019	11/14/2019	1/23/2020	3/26/2020	5/28/2020	7/30/2020
KK6GIO	Larry Vanselow	7/18/2019	9/19/2019	11/21/2019	1/30/2020	4/2/2020	6/4/2020	8/6/2020
K6RJM	Rob McNicholas	7/25/2019	9/26/2019	12/5/2019	2/6/2020	4/9/2020	6/11/2020	8/13/2020
KE6HCE	Armando Picciotto	8/1/2019	10/3/2019	12/12/2019	2/13/2020	4/16/2020	6/18/2020	8/20/2020
NI6A	Don Simon	8/8/2019	10/10/2019	12/19/2019	2/20/2020	4/23/2020	6/25/2020	8/27/2020
KM6TCB	Dave Roth	8/15/2019	10/17/2019	12/26/2019	2/27/2020	4/30/2020	7/2/2020	9/3/2020
KK6ZPM	Karen Fenton-Leong	8/22/2019	10/24/2019	1/2/2020	3/5/2020	5/7/2020	7/9/2020	9/10/2020

**Action Item: Help create a deep pool of skilled NC operators.** Please contact Howdy [ke6bee@arrl.net](mailto:ke6bee@arrl.net) if you are interested in taking a net control assignment.

### Thursday Net Training Exercises

Following the net check-ins every Thursday at 1900, KARO ECHO usually runs a training exercise to learn and practice skills that are important for successful disaster communications. [A list of training exercises](#) is posted and maintained on the training page of the website. We continue to average 14 check-ins per week, with very strong growth in participation in recent months. **Since September, all weekly nets have had 17-22 check-ins.** Thanks for your participation. In 2018 we had 47 unique callsigns check-in. That count has strongly grown to 74 unique callsigns over 2019.

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## About KARO ECHO

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KARO ECHO is the name of the Kensington Amateur Radio Operators and the El Cerrito Ham Operators mutual benefit association, an all-volunteer non-profit group of amateur radio operators providing auxiliary communications for the cities of Kensington and El Cerrito in the event of a disaster. KARO ECHO works with CERT (Community Emergency Response Teams) in Kensington and El Cerrito, but is not an official part of the CERT program.

Monthly in-person meetings of KARO ECHO are on the 2nd Monday of each month at 7:00 pm at the Arlington Park Clubhouse, 1120 Arlington Blvd, El Cerrito, CA. The next meetings are:

- ♦ Dec. 9<sup>th</sup>, 2019
- ♦ Jan. 13<sup>th</sup>, 2019

Yearly dues are \$30/year for individuals, \$40/year for a family membership. Mail to:

KARO ECHO, PO Box 2025, 6324 Fairmont Ave, El Cerrito, CA 94530-3651

Please see our website for more information: [www.karoecho.net](http://www.karoecho.net)

You can contact the KARO ECHO board by email: [info@karoecho.net](mailto:info@karoecho.net)

### KARO ECHO Facebook

The [KARO ECHO Group on Facebook](https://www.facebook.com/groups/1451216838315743/) has a lot of good information, more than is contained on our website. There is a whole wide world of emergency communications information at <https://www.facebook.com/groups/1451216838315743/>. Check it out and be inspired of what we can do to help disaster victims in our community.

### Weekly Training Net

The Karo-Echo Weekly Training Net meets every Thursday evening immediately after the West Co Co County RACES/ACS Net; but not before 1900 on 146.415 MHz Simplex. Details at <https://www.karoecho.net/events>

### KARO-ECHO Frequencies

The KARO ECHO primary frequency is still 146.415 MHz simplex. **Our secondary frequency however has been changed to 146.475 MHz simplex** thus creating a 60 KHz spread between operating frequencies that will reduced adjacent frequency desensing.

### KARO ECHO Dues

**Action Item: Please send in your dues** to KARO ECHO -- P.O. Box 2025 -- El Cerrito, CA. 94530-3651 or see Larry at this Monday's meeting at the Arlington Park clubhouse. You can still be a non-voting member of KARO ECHO without paying dues, but only licensed Amateur Radio Operators and dues paying members will be allowed to vote. So if you can't afford \$30 for full membership (or \$40) for family membership), please come and participate in any case. Dues cover our 510c3 registration, post office box, web page, station operating manuals and more. Your input on useful expenditures to aid emergency communications are welcome.



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## Outreach, Education and Licensing

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### SET Video on YouTube

**We are looking for volunteers to take the lead producing a video documenting the Feb 23 SET** using assorted voice recordings, videos, photos, and narration. If you have any video editing or production skills (or you can recommend someone) please contact [info@karoecho.net](mailto:info@karoecho.net) We need your help -- don't be shy.

### CERT SET YouTube Video

See the CERT SET Youtube video link

<https://www.youtube.com/watch?v=66DdgGLIn4c&list=PLROOaUIKdrEgSID1bQJZojW3PzfURoEY-&index=144&t=0s>

### ELMERING

**Elmering/Mentoring** is available by request. Email [info@karoecho.net](mailto:info@karoecho.net)

In the meanwhile, please check out the plethora of disaster radio communications topics at <https://www.karoecho.net> website and/or request specific literature to be created.

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## KAROECHO.Net Website

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Especially, check out the EVENTS Page ( <https://www.karoecho.net/events> ) and the WORKSTREAMS drop-down menu which will lead one to an extensive training page that provides online learning at your own pace. Everything from the very beginning to advanced EmComm operations is detailed. The RESOURCE page has many excellent outside links.

- ♦ If you are on Facebook, contribute to the KARO ECHO Facebook Group Page at <https://www.facebook.com/groups/1451216838315743/>
- ♦ If you haven't already filled out the JOIN form please do. Find it as a drop down menu under "Get Involved" See <https://www.karoecho.net/join>
- ♦ A follow-through novice primer has been put on the website for new hams once they have bought their radio and want to learn more. See: <https://drive.google.com/file/d/10J-569BRrx5adhA-hJGPeNITU6B9Yi6z/view>
- ♦ Also a new Dual-Band antenna primer for new hams who want to graduate from the rubber-ducky world is at [https://drive.google.com/file/d/1u\\_ozABBRYDJDACFJRTV\\_rxWF1WjCgW\\_I/view](https://drive.google.com/file/d/1u_ozABBRYDJDACFJRTV_rxWF1WjCgW_I/view)
- ♦ Note that the Tram 1480 gain dual band antenna is currently still available for \$51 (no tax and free shipping) on ebay or from Home Depot. That and an inexpensive speaker tripod is a dynamite combination for portable operation. This antenna is equivalent to the Diamond X-200a antenna which sells at HRO for \$125.00 before taxes and shipping.
- ♦ For newbies, please visit <https://www.karoecho.net/workstreams/training> and read the study materials. It is all there except for hands-on experience. Ask questions!  
**On every Thursday evening net** there will be a training session and/or discussion. Summaries of recent net events are found under our past events page at <https://www.karoecho.net/events/past-events>
- ♦ Note: See the **KARO ECHO Agenda** for our upcoming Monday, December 9<sup>th</sup>, 2019 Meeting see: <https://www.karoecho.net/events> the agenda will be made available no later than the Sunday immediately preceding the meeting.
- ♦ All recent KARO ECHO **Minutes will be found at our Past Events page** We are now including past Executive Board Minutes as well. [Newsletters are on the Documents Page.](#)

If you desire to be removed from this email list, please email [info@karoecho.net](mailto:info@karoecho.net)